Skin Eruptions, and How to Cure them. See page 37.
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HEALTH

A WEEKLY JOURNAL OF

DOMESTIC AND SANITARY SCIENCE.

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

VOL. XII.—No. 289. FRIDAY, OCTOBER 19, 1888. [PRICE TWOPENCE.

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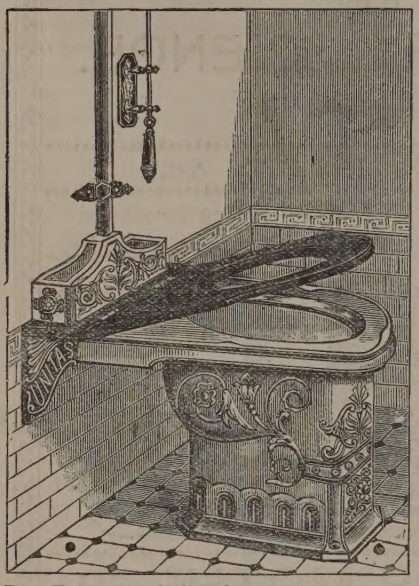

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◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, OCTOBER* 19, 1888.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

WITH reference to the recent alarm regarding cigarette-smoking and disease of the throat, a medical contemporary remarks that the note of alarm which has been sounded in the lay press as to the supposed baneful effects of cigarette-smoking on the throat would hardly, it imagines, have found any echo except in the "silly season." The only new feature in the question as now raised is the suggestion that certain foreign cigarettes contain a poisonous material which is apt to cause malignant disease in the tissues to which it is applied. There is no doubt whatever that much of the tobacco sold in this country, especially of the more expensive kinds, is "doctored" to a degree which is dangerous to health, but the evil wrought thereby shows itself more in functional disorder (indigestion, palpitation of the heart, giddiness, &c.) than in organic disease. Such local mischief as is caused by smoking depends on the irritation which the heat and the more or less acrid fumes of the tobacco exert on the delicate parts with which they are brought in contact.

IF cigarettes are more hurtful in this way than cigars or pipes, we are disposed to think that the cause is to be found, not in any "unclassified alkaloid" which they may contain, but in the greater number of them which can be smoked, and in the free manner in which the smoke is inhaled. It is not so much the strength of the irritant as its continuous application which is likely to produce chronic changes in the lips, tongue, or throat, which may eventually become cancerous. Moreover, the really artistic performer with the cigarette is not satisfied unless he brings the smoke habitually into contact with parts—such as the larynx, trachea, and the upper part of the pharynx—which the grosser fumes of the pipe or cigar are very seldom allowed to reach, and then, as a rule, by accident. Again, cigarettes are largely indulged in by many who are intolerant of tobacco in any other form, and who are therefore, it may be presumed, more liable to any ill effect which the "herb nicotian" can produce. Much more convincing evidence than is forthcoming seems to be required to justify the condemnation of Egyptian or Turkish cigarettes as causes of cancer. On the whole, the hygienic alarmist is, perhaps, "too much with us," and the cry of "Wolf!" if too often raised about doubtful or trifling evils, is likely to lead to disregard of the warnings of science on matters of graver import.

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DR. D. R. PEARSON, writing to a medical journal on cigarette-smoking, remarks that an important "point is, that the enormously increased use of cigarettes accounts for a set of symptoms not hitherto recognized as being due to the abuse of smoking. The evidence contained in these letters clearly suggests the wisdom of keeping our minds upon the alert on this subject. Speaking for that which I know best, I state that a relative of mine came to this country from Philipopolis to be treated for an irritative form of chronic bronchitis. I may add here that this was occasionally accompanied by bleeding from the fauces. Prominent physicians in London were consulted, and threw no light upon the nature of the case as subsequently unfolded.

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"RETURNING through Paris, the sufferer, unrelieved, consulted a first authority there, and again in Vienna a physician of European repute. Being still no better, a German physician in Constantinople was recommended, and he, being possessed of the experience now claimed by 'A Country Doctor,' at once attributed the disease to its true cause—inordinate indulgence in cigarettes—a cure being readily effected on their discontinuance." Dr. Pearson adds that he hopes "A Country Doctor"

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AND OF ALL CHEMISTS.

may be induced to describe what he recognizes as the "cigarette throat." "My view," he continues, "is that undue cigarette-smoking is capable of doing mischief beyond its local effect, from the inducement it offers to the full inhalation of the smoke. This accounts for the class of cases so promptly diagnosed by a physician practising in the metropolis of Turkish cigarettes.

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"There is much to be said for the suggestion in your note that 'cigarettes are largely indulged in by many who are intolerant of tobacco in any other form.' Further, the exceptional heat and acrid quality of burning paper is well known, and enjoyable cigarettes are often smoked to a very fine stump. In Russia, especially, the quality of the paper is constantly under suspicion as a source of mischief." From these remarks it would seem that Sir Henry Thompson, in his remarks made some years ago on cigarette-smoking, had ample justification on his side. The tendency of opinion appears to indicate that there is less danger of throat trouble in connection with the use of pipe or cigar than when cigarettes are smoked.

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A timely hint has been given regarding the re-assembling of schools and infectious diseases by a contemporary. The introduction of infectious disease into a family, it rightly remarks, is distressing and disturbing enough. But this, it adds, is little compared with the hardship of its introduction into schools. Yet this is often done with most singular carelessness. A few days after a school reassembles, a boy shows *malaise* and develops infectious disease, with which he may infect twenty other boys, possibly some of them with fatal results. Short of this, the derangement of the school and of the work and plans of the individual boys is enormous. This is a case in which the argument for notification is very cogent, and in which carelessness is something like a crime.

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Every parent who is guilty of such carelessness ought to be made to realize the gravity of his fault. A few successful prosecutions for the exposure of children with infectious diseases would do good. There are some parents who are not amenable to any other kind of argument. But, in general, the evil "is wrought by want of thought." It is not the less cruel in its operation. A word in time may induce all parents to reflect on their responsibility in this matter. If their children have had any doubtful illnesses, let them be kept at home till all fear of conveying disease is clearly over. The profession is often pressed in this matter. It should not suffer itself to be so. When there is any doubt in any given case, the benefit of the doubt should be given, not to the single child, but to the school to which it is proposed to send it. We give this advice with a grave sense of the evil to be averted. With the spirit of these remarks, I am certain every right thinking parent will sympathize.

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I observe that the last Report of the Commissioners of Inland Revenue shows that for the year ending March 31st, there has been an increase in the quantity of spirits charged with duty. The amount of increase was 436,114 gallons. An increase has not occurred since 1884. The receipts from beer duty for the past year amounted to £8,874,510, and the repayment on beer exported to £162,977, leaving the net receipts at £8,711,533. This is the greatest amount which the beer duty has ever attained. Such statistics are decidedly to be regarded as unfavourable both to the health and the morals of the people.

Original Essays

"Life is not to live, but to be well."—*Martial.*

HEALTHY AND UNHEALTHY BEDROOMS.

By A. J. Daniels.

The obvious corollary to Solon's wise saw, "Know thyself," is "Know how to take care of thyself," or, in still plainer language, learn the laws that govern health, and not only follow the terse advice of Sol Gill, and "make a note" of them, but carry them practically out.

Those who wilfully run amuck of Dame Nature are "more knaves than fools," to quote old Marlowe, for it is given to everyone to acquire knowledge. All who wilfully neglect the rudiments of hygiene are not only themselves the sufferers, for ignorance and callousness beget ignorance and callousness, and the spirit of *laissez faire* in matters of every-day life is every whit as contagious as the scarlet fever.

This foolish neglect of simple facts, in connection with the great and important subject of health, is specially apparent in connection with our bedrooms.

It is no exaggeration to say that most people regard the sleeping apartments in their houses as of quite secondary importance. Their living rooms are warmly carpeted, gaily decorated, well lighted and ventilated, and due care is taken to keep everything therein in apple-pie order. But turn to the bedrooms, and in nine houses out of ten a striking difference is apparent.

There is a bareness about them positively appalling; the carpet is spare, a fire is a rarity, ventilation a curiosity. Yet a goodly portion of everyone's life is passed "between the sheets," and the period of sleep is not by any means so unimportant as seems to be frequently considered. Awake, and with every faculty in working order, dangers are visible, and may be guarded against. But wrapped in the arms of Morpheus, the strongest man, as a distinguished African hunter once remarked, is a helpless child. No reference is of course intended to the thief who breaks in and steals, for, after all, Bill Sykes and his followers are very tangible foes, and can be dealt with as the law directs. There are, however, other midnight intruders more dangerous still, and not to be so easily tackled.

The damp, rising from a badly constructed foundation, a cold draught from an open window, the exhalations from drains creeping through carelessly made floors—these are types of the insidious enemies that defy the legislature and all its works, and take the health and strength from those exposed to their influence as effectually as the legendary vampire.

There can be little doubt that bedrooms should be situated some distance from the ground level. People who live in cellars are rarely healthy and never robust. Country folks, it may be contended, are accustomed to make their beds on the ground level, and often on the earth itself. That is quite true, and it is really surprising that they do not suffer more than they do. As it is, the prevalence of rheumatism and kindred affections among dwellers in villages is remarkable, and but for the active life they lead in the fresh, pure air, the predominance of such maladies would be still more general. Dwellers in cities have to contend against disadvantages unknown to bucolics, and the risks the latter run with impunity, dare not be attempted by Londoners who have any respect for their constitutions.

A bedroom at a reasonable distance from the ground level pre-supposes dryness—a condition of paramount importance. Unfortunately, however, distance does not always lend enchantment to the view, nor does it keep dampness away. Houses built of inferior bricks and situated on clayey soils, or in valleys, possess the undesirable property of absorbing moisture like a sponge, and damp, having once obtained a start, has a propensity for creeping in all directions. House hunters should bear this in mind, and examine the walls of the bedrooms in all houses they go through. Should dampness subsequently appear when the house is occupied, fires ought to be lighted frequently and ventilators fixed. This is making the best of a bad job, but it is needless to add that all who are in a position to do so should seek fresh quarters on discovering the presence of damp.

The mention of fires in bedrooms calls to mind a singular and striking anomaly in the habits of present-day people. When the air is cold and the weather inclement, it is the general custom to wear garments of extra thickness and warmth, and to sit round roaring fires. But on going to bed, what takes place? In ninety-nine cases out of a hundred, people pass from the warm living-rooms into chilly bedrooms. As if the sudden change from extreme heat—for there can be little doubt that what with fires, gas, and insufficient ventilation, people are in the habit of breathing an atmosphere the temperature of which is considerably higher than it should hygienically be—to excessive cold is not sufficiently absurd, they proceed to divest themselves of their several warm garments, to garb themselves in thin linen nightshirts, and to consign their heated bodies to the cooling influence of unsympathetic sheets! This process reminds one of nothing so much as the practical joke of which Falstaff was the victim. "When I was more than half-stewed in grease," groaned the fat knight, "like a Dutch dish, to be thrown into the Thames, and cooled, glowing hot, in that surge, like a horse-shoe; . . . . hissing hot."

Conventionality has habituated one to the custom; but a really serious contemplation of it cannot fail to make the utter absurdity of the custom clearly apparent. The Chinese, from whom many useful lessons have been learnt by more civilized nations, can give us a wrinkle on this subject. John Chinaman sleeps in the same kind of clothes as he wears in the day-time, the easy and flowing garments to which he is addicted allowing of this without causing inconvenience. Western nations are not favoured in the latter respect; but, still, it would be quite possible to replace the airy nightshirt at present in vogue by some garment which, as regards warmth, was equivalent to the several distinct articles of clothing constituting the working-dress worn by day.

If linen nightshirts are worn, and cold sheets preferred, it stands to reason that the warmth both lack should be present in the atmosphere. To heat the body and to suddenly deprive it of its caloric is contrary both to science and common sense. Dwellers in foreign countries invariably sleep in flannel garments, and the backwoodsman wraps himself in a stout woollen blanket, and defies the elements. They are sensible. The human frame should, undoubtedly, be clothed in woollen garments, for wool is a bad conductor of heat. Enveloped in flannel, the body maintains a normal temperature, which is of the greatest importance. No sooner does the temperature fall than the action of the various functions becomes impaired; the nerves get out of gear, and the whole system suffers disorganization. Who has not, at some time, felt so cold that it was impossible to sleep? That is an example of the influence exercised by the blood on the brain and nervous system. The question of warmth cannot be over-rated. But let no one run away with the idea that the more clothing, and the thicker, piled on their beds, the better for their healths. Nothing could be more absurd. One does not want weight, nor too great a heat. A healthy temperature can be obtained by wearing a flannel suit and sleeping between blankets.* Let sufferers from chronic colds try this *régime*, as well as those afflicted with sluggish circulations, with the accompanying annoyances of cold feet and other sleep-disturbing afflictions.

Allied to the subject of warmth is that of ventilation. Many seem to consider that by opening a window several inches a perfect system of ventilation is set in operation. They get an ample supply of "fresh air," to be sure—sometimes so much, indeed, that mustard and water and gruel have, later on, to be called into requisition; and these silent witnesses prove conclusively that the sufferers have gone the wrong way about the business. The chimney is also looked upon as a ventilating-shaft of superlative merit; but it does not always "live up to" its reputation in this respect.

The theory of ventilation is that the heated air, contaminated by breathing, rises to the ceiling, and, finding an exit, makes its escape, drawing into the room as it goes a fresh supply of cold air. It is very evident that as the foul air escapes overhead, the fresh air should enter low down. A perfect circulation will then be set in motion without a draught. The only way to accomplish this operation satisfactorily is by means of two ventilators, one placed close to the ceiling and the other a foot or two—according to the loftiness of the room—from the floor. open windows are well enough in the summer, when the air is warm and stationary; but in the winter, when the stormy winds blow into the room, thereby reducing the temperature to freezing point, the practice is not to be recommended. Damp, cold air, fog laden, or blowing from the east, should not be risked even by the most robust.

The aspect of bedrooms is also of moment. A southern aspect is perhaps the most acceptable to both men and plants. Bedrooms so situated are neither unduly hot in summer, nor uncomfortably cold in winter. It is not good that the power of the sun should be concentrated on a sleeping room during the latter portion of the day, for the atmosphere is rendered hot and stuffy, and anything but conducive to restful repose. The rising sun is not too powerful during the early hours of the day, and the genial warmth and brightness is rather acceptable than otherwise. The hygienic influence of the sun is too often neglected, and the merits of a sun bath are not known, or they would be appreciated.

Some maintain that carpets in bedrooms are unhealthy. Given a good sound floor and a mat or two, easily removable and shaken, and carpets may be dispensed with. But a floor full of huge cracks should be covered, if not with a carpet, with some form of oilcloth, which, though clean, has the disadvantage of being a terribly cold material.

Bedrooms situated in attics are not desirable. In winter they are invariably intensely cold; in summer insufferably hot. The comfort of the occupants might be considerably increased during the dog days if the slates were daubed with whitewash. The coldness might

* Such night-garments and sleeping-suits, made of comfortable and non-irritating wool, and other materials, can be obtained from the Cellular Clothing Co., 75, Aldermanbury, London, E.C.; and from Messrs. E. Ward & Co., Bradford.

also be mitigated by placing sheets of asbestos cardboard, a fireproof composition and non-conductor, beneath the slates or tiles.

As to the furnishing of bedrooms, it stands to reason that the less the furniture and the handier it is as regards size, the greater the facility there will be to keep the apartment clean and healthy. Wall papers are not usually an acquisition. There is the risk of poisonous colouring matter (unless such as those made by Woollams & Co. be used); they soon fade and grow dirty, and cannot be cleaned. Distemper, tinted "to taste," as the cookery books say, is an excellent substitute, and it is surprising it has not superseded paper as a wall covering. Wooden bedsteads are an anachronism, and stuffed mattresses and bed-curtains have had their day. Wire mattresses are easier to handle and last longer, and those who are afraid of draughts are recommended to wear night-caps, though, as a general rule, one cannot do better than leave the head *au naturel*, that is, uncovered. Light cane screens, to be folded up and put aside during the day, will prove useful for warding off chilly currents of air.

The sick-bedroom deserves a special article to itself. The importance of thorough cleanliness and ventilation cannot be too emphatically insisted upon. As to temperature, that, of course, depends entirely upon local circumstances, and the advice of doctors and trained nurses. A good artificial light is also an essential. Gas is convenient but unhealthy, and vitiates the air. Oil lamps give a pure light, and are cool, but they require careful and constant attention; a trifling neglect is liable to create unpleasantness. A small "glow" electric light, supplied from a portable battery, is perhaps the most perfect light for the sick-room. Such an arrangement requires little or no attention, it is cool and clean, may be moved from place to place as convenience dictates and circumstances require, can be turned up at a moment's notice by simply pressing a button; and finally, it gives an excellent light.

THE CHEMISTRY OF THE HOUSE.

By Dr. Drinkwater, F.C.S., &c.
Lecturer on Chemistry in the Edinburgh Medical School, &c.

THIRD PAPER.

A GLASS OF BEER.

Man from the earliest times has been acquainted with fermented liquors. Beer, which we associate with our own country, is really of Egyptian origin. Herodotus writes of the Egyptian wine drawn from barley; and this so-called wine was apparently a beverage resembling beer minus the bitter principle. Poets and Bacchanalians have resounded the praises of our "nut brown ale," and in its proper place is perhaps the most harmless—we might say, most wholesome—of alcoholic beverages. The chemical processes involved in the manufacture of a glass of beer are somewhat complicated, and it will suit our purpose best to take up each branch separately. Beer can be produced either from malt or sugar—the former by preference if quality is desired, the latter for cheapness. We will, therefore, first of all consider the process of malting.

We all of us know the appearance of starch either in the form used for laundry purposes or in its purer condition as corn-flour. By the aid of certain chemical agents, starch can be converted into sugar. In fact, the chemical difference between the two is simply water; that is to say, if by any means we can make starch, no matter what the source may be, chemically combine with a definite amount of water, sugar is the result. A number of plants furnish us with starch, and any of these will also furnish us with an alcoholic liquor. Barley is peculiarly adapted for the purpose, for, besides starch, it contains other bodies capable of being changed by the malting process, and ultimately giving both flavour and body to the beer. Nature intends the starch of cereals to serve as food for the young plant, and as germination proceeds, this starch is gradually converted into sugar, which, being absorbed into the plant-tissue, nourishes it until such time as it is able to seek its own food. The maltster takes advantage of this fact, and malting consists in great measure in allowing the barley to undergo partial germination or growth in presence of moisture and in absence of light, both conditions being favourable to this change.

This process, although apparently simple, is in practice one which requires care and skill. The grain is steeped in water, then drained and spread on floors of the malt house, where a considerable rise in temperature takes place; it is turned over from time to time, and finally dried in a kiln, varying degrees of heat being used depending on the quality of malt desired, a low temperature producing a pale malt suitable for pale ales, a high temperature producing a dark malt, which is used for stout and porter.

Malt differs from barley in several particulars. A small amount of sugar has been formed, imparting to it a sweet taste; a powerful substance called diastase has been produced, a substance which has the power of changing starch into sugar so strongly marked that one part of diastase is able to convert two thousand parts of starch. It is this substance which has caused malt to be so largely used in medicine of late years. "Maltine" and similar preparations consist of extract of malt. The diastase contained in these preparations changes all the starch of our food into sugar, and aids digestion. The juices of the stomach and the saliva are able to do their work in a healthy person, but in the dyspeptic the power is lost or lessened, and the maltine, or rather the diastase of the maltine, takes their place.

The maltster having prepared the malt, it passes next into the hands of the brewer, who extracts all the soluble materials from it with hot water, by an operation called "*mashing*"; during this extraction the diastase, acting on the unchanged starch, converts it into sugar, so that the "*wort*," as the liquid is now called, is a solution of sugar with albuminous and other bodies. These albuminous substances, unless removed, would cause the beer to soon turn bad, and they therefore have to be removed by boiling, which causes them to solidify and fall to the bottom of the "copper," just in the same manner as the white portion of an egg (which is almost pure albumen) solidifies on boiling. The hops are added at this stage, so that the bitter principle of the hop may be dissolved by the hot wort. The liquid is now cooled and run into large vats, when yeast is added, and that peculiar process called fermentation is commenced.

There are many kinds of fermentation, but the one we have to deal with is produced by yeast, or barm, as it is called in some places. If we add some yeast to a solution of sugar, and keep the whole in a warm place, a visible change takes place in a few hours. The clear liquid becomes muddy, the yeast increases in quantity, and bubbles of gas rise to the surface, in a day or two all sweet taste has disappeared, and further examination would show that the liquid contained alcohol. How has all this been brought about?

Yeast itself is a plant of a simple kind, allied in many respects to the fungi or the mushroom class, and the sugar, or a portion of the sugar, serves as its food, the remainder being broken up into alcohol, which remains behind in the liquid and carbonic acid gas, and escapes. Other substances are formed, but, as far as our purpose is concerned, they are of minor importance. A precise answer to our question is yet wanting. We know that the yeast in growing is capable of producing this change, but as to the exact manner in which it is carried out we are at present unable to explain, but we class the whole series of changes under the generic name of its fermentation. It is this process, then, that the brewer uses in the production of beer from malt.

Now, it is obvious that, as sugar plays a very important part in this fermentation, that the brewer could start with sugar instead of malt, and many do—not with the sugar that we are accustomed to see in our sugar-basins, but a less sweet variety, called grape-sugar, because it occurs in grapes and other fruit. I have already shown you how starch can be converted into sugar by the plant. The same change may be brought about by chemical means, and this peculiar kind of sugar is very largely manufactured in Germany from starch for the use of brewers in this country.

The beer having been allowed to ferment to the extent required, is now run off into casks, the fermentation stopped, and, after allowing it time to settle, it is ready for consumption. The intoxicating qualities of beer are due, of course, to the alcohol contained in it, and the following table will show the quantities of alcohol in various beverages :—

20 oz., or 1 pint of	Beer	contains	1	oz. alcohol.
,, ,,	Stout	,, a little over	1	,, ,,
,, ,,	Claret	,,	1·5	,, ,,
,, ,,	Sherry	,,	3	,, ,,

Beer as supplied by the publican is sometimes adulterated by vile concoctions, which serve to cover over the inferior qualities of a bad article. Publicans, however, are a much maligned race, and, except in some of the smaller and low-classed houses, I do not think adulteration is much practised. To give directions for the detection of these frauds by any but trained chemists would be useless.

The Sanitary Institute.—The first meeting of the council of this society, which has recently been incorporated, was held at the Parkes Museum on Friday, Oct. 5th. The Institute is founded to carry on the objects of the Sanitary Institute of Great Britain and the Parkes Museum. Sir Douglas Galton, K.C.B., F.R.S., was unanimously appointed chairman of the council and Mr. G. J. Symons, F.R.S., the registrar. H.R.H. the Duchess of Albany and H.R.H. the Duke of Cambridge have graciously become members of the Institute. The Marquis of Ripon, Earl Derby, Earl Bathurst, Viscount Cranbrook, the Bishop of London, Lord Mount Temple, and 370 other members and associates were enrolled. An important letter was read from the Charity Commissioners, saying that they considered that the new Institute was likely to prove a powerful means for the diffusion of sanitary knowledge, and promising to grant facilities to enable the Institute to give lectures in the various buildings which the commissioners proposed to establish in different parts of London. It was decided that the Institute's first examination for local surveyors and inspectors of nuisances should be held on November 8th and 9th. A programme of lectures for the winter session is in course of preparation.

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

SKIN ERUPTIONS.

The prevalence of diseases of the skin in some form or other is very great. By diseases of the skin is meant any deviation from its normal tone and state. A few pimples, however slight, constitute a skin disease, and it has been asserted that half the people of Great Britain have some form of skin disease. Probably this estimate is far too low.

The unsightliness of all forms of skin eruptions, if nothing else, makes it specially desirable that every possible effort and resource should be brought into requisition to cure them. No matter what the charms of an individual may be, pimples, blackheads, florid sores, detract from them in greatest measure, and sometimes even make their owner at first repulsive to the very squeamish.

A very common skin disease on the face is *acne*, whose presence is easily determined by blackheads, becoming roseate pimples, and then little white spots containing matter. Acne sometimes leaves very ugly scars, and it is not uncommon to see a face scarred with it almost as badly as with small-pox. It is very common in young people, and most so among those with dark complexions —the people with dusky, muddy complexions. There is but one way to cure acne, and that is along physiological lines. The skin must be relieved of extra work by giving the bowels and kidneys a flushing now and then. If there be constipation, take a Cascara tabloid every night at bedtime; if not, take half a tabloid twice a week. Take one night a teaspoonful of cream of tartar in a glass of water on retiring, and the next night one quarter of a seidlitz powder in the same way. Apply externally, with a soft cloth, morning and evening, the following lotion:—Hydrarg. bichloride, four grains; aquæ rosæ, eight ounces. Sign, "Poison—for outward use only."

An excess of meat should be discarded, and all alcoholic beverages absolutely interdicted. For keeping the skin soft and supple Lanoline Cold Cream is excellent, and is a good protective, healing application. Lanoline Soap should also be used.

The most usual of all the skin diseases seen by the dermatologist is eczema. It appears upon the babe a few days old, and away at the other extremest portions of life. It occurs in all climes, and is restricted to no single part of the body. The chief characteristic of it is its itching, which is sometimes almost beyond endurance. Only those know what itching is who have had eczema. About seventy per cent. of this disease is easily curable with the following prescription:—Benzoated oxide of zinc ointment, one ounce; Lanoline Cold Cream, one ounce; carbolic acid, ten drops. This will relieve the itching, and cure most cases. Where it does not cure, ten drops of oil of cade may be added.

In babies eczema is best cured by keeping the part, as behind or under the ear, clean, and giving a little cod liver oil, the only form of which for children is Kepler's Solution, and, indeed, for grown people too. Here, also, Lanoline Soap should be used. People generally do not know how really deleterious to the skin are the soaps in the market. Those with tender skin will find nearly all the soaps made to be bad, and hence dermatologists interdict them in eczema.

THE POWER OR PROPERTY OF HEAT-STORAGE IN THE HUMAN FRAME.

Dr. G. Shearer writes as follows to a medical contemporary:—In conversation with a friend the other day who had spent several years of his life in Lima, the capital of Peru, situated some 12 degs. south of the equator, where it never rains and the seasons are unknown, he remarked on the fact of his predisposition to colds of late, whereas the first winter after his return from Lima he could not find a place in England cold enough for him, and indeed for some time seemed proof against cold. His experience tallied with my own the first winter or two, but especially the first, after my return from China. I did not mind the cold at all, and used to boast that I had either acquired a reinforcement of bodily health through my residence in the subtropical climate of Hankow, latitude 32½ degs. north, or else that an *actual bottling up of heat and sunshine* had taken place within my system. Anglo-Indians, the children of Anglo-Indians and Anglo-Chinese, and the natives of India and China, when they come to reside temporarily in England, have the same tale to tell.

Now, if it can be demonstrated, as I believe it can, that heat is capable of being actually stored up in some latent manner, within the body, yet without making itself manifest by means of the thermometer, as light can be stored up in some bodies and electricity in others, then we have got hold of an important physiological principle hitherto unappreciated. Sulphide of carbon is a substance which had long been known to chemists for the possession of a certain luminosity in the dark, but only quite recently has it been utilized so as to make clock faces, match boxes, and such things luminous in the dark. It has been proposed to make reflecting lanterns of this substance for the use of persons in charge of powder magazines, and other inflammable stuffs; and they have been found to be, in fact, sufficiently luminous to enable such persons to see their way; and from the absence of caloric and flame they are, of course, perfectly safe.

It has been proposed to apply the same substance to the exterior of dwelling houses, so as to save the expense of gas or electric light, and even to render niggers luminous. It is said, and here is the point, that when the luminosity fades, as it is apt to do, that it can be immediately restored by burning a magnesium light in front of the faded plates. Is it possible that this storage of light by inorganic bodies may be paralleled by the storage of heat in living organic bodies? The storage of heat in the case of bodies passing from the frozen to the liquid or soft condition is well known, many degrees of caloric being absorbed, in a latent manner, before the change becomes manifest. As a similar absorption of latent heat takes place undoubtedly in the case of living animal bodies passing from sub-frigid to temperate, why should there not be a continuous accumulation of heat, and it may be of light also, in the bodies of human beings steeped for years, so to speak, in tropical sunshine? Would not this theory afford a rational explanation of the insensibility of Africans, Orientals, and Anglo-Indians to the chills and damps and cold of our English climate during their first winter's exposure.

This principle of an *internal and external* storage of heat is of the utmost importance to remember in the treatment of delicate people and *poitronaires*, who are constantly getting upset by the atmospheric changes and the cold. Besides getting well warmed themselves, their clothes, boots, and wraps should be thoroughly aired before the fire before being put on and going into the open air, and the seat covered with a warm rug. Every unwarmed garment, the boots especially robs the body of a large amount of caloric before they become warm and comfortable, and this continued withdrawal of vital heat and necessary warmth leads at length to an inevitable, and it may be a fatal, chill.

Mary Stuart; or, the Captive of Lochleven—A Cantata for Ladies' Voices. The poem by J. Stewart; music by Gustav Ernest. (Published by J. & J. Hopkinson.) We have great pleasure in calling the attention of young ladies who frequent "quires and places where they sing," conductors of choral classes, and others, to this charming cantata. The poem, which is cleverly written, deals with the escape of Mary from the Castle of Lochleven. It is told in rhythmic verse, and is skilfully wedded by the composer to suitable music. As specimens of Mr. Ernest's work, we would single out for commendation Queen Mary's song, "O could I wing my weary flight"; the Page's song, "When all the Land"; and the spirit-stirring chorus, "Thou shalt be free." Altogether the little work should find much favour in "the land of brown heath and shaggy wood," not only from its intimate connection with one of the most tragic episodes in Scottish history but also from its intrinsic merits.

New Books and Periodicals.—Messrs. Cassell & Co. have just issued the first part of a new serial, entitled "The World of Adventure," which bids fair to form one of the most exciting and interesting of the many works issued by this firm. With the young especially it should prove a great favourite. *Public Health*, now in its sixth number, continues to prove an instructive journal for medical officers of health and sanitary inspectors. We wish we could reproduce the two illustrations which are given in this number of two patients suffering from small-pox, the one having been vaccinated, while the other remained unvaccinated. The marked mildness of the disease in the former, as compared with the horrible disfigurement of the face in the latter, would be worth a volume of argument against the unscrupulous assertions of anti-vaccinators. *Babyhood* for October continues its prosperous career as an able exponent of all that relates to the care of young infants. All its articles are written by those who possess a practical knowledge of the topics of which they treat. *The Illustrated Medical News* is a new candidate for the favour of the professional public. It represents a new departure, both in respect of size and of letterpress. Its articles are well written, and as it promises papers by well-known physicians and surgeons, it is certain to command a large circulation. We wish it all success, a result which is likely to be the more speedily attained by the adoption of a liberal policy towards the public teaching of health.

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The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

TIGHT LACING.

In connection with the article, published on this subject in *Health*, No. 284, the following remarks culled from the *Lancet* will be read with interest:—Amongst the various subjects to which the members of the British Association directed their attention at the late meeting at Bath, and upon which the ladies attending the Biological Section may fairly be regarded as competent to express an opinion, was the custom of women to wear stays.

The discussion might have been considered a mere playful interlude introduced by Professor Roy and Mr. Adami to enliven the proceedings, were it not that trivial subjects—trivial, that is, from the Association's point of view—are most likely to excite the bitterest feelings. The wearing of corsets has really two aspects, which deserve separate consideration—the hygienic and the æsthetic.

From the hygienic point of view, the question resolves itself into one of the degree to which the compression, or, as women say, the support, of the chest is carried, and the rapidity with which that degree is attained. The body as a whole, and the several organs composing it, have a wonderful power of accommodation to surrounding circumstances, permitting changes of form and even of position that appear at first sight incredible, without material impairment of function. If the form of so unyielding a part as the head can be greatly altered, with preservation of ordinary brain power, as occurs amongst many savage tribes, by pressure begun early and steadily continued, we may be sure that much more might be accomplished if similar pressure were applied to so mobile a part as the chest without greatly impeding the function of respiration.

Such moulding of the form of different parts is familiar to all as an effect of disease; and many a man or woman, after an attack of pleurisy terminating in empyema and adhesions, possesses an unsymmetrical thorax, which nevertheless serves him or her well throughout a long and active life. The body, in other words, permits considerable liberties to be taken with it without serious impairment of health; and if pressure of the chest were commenced in early childhood, and steadily persisted in, no doubt still greater deviation than is commonly seen could be induced. As a matter of fact, however, in this country such pressure is not applied; the stays given to girls by sensible mothers up to the age of fourteen or fifteen are soft, and exert little more pressure than the waistcoat of a boy. At that age, when the figure naturally changes, the firmer support is taken into use, and the amount of harm it occasions is dependent on the degree to which support becomes compression.

There are no doubt many girls who, desirous of making themselves conspicuous and, as they foolishly believe, attractive, tighten their waists to such an extent as to incapacitate them for taking exercise and for the necessary ingestion of food; they consequently become weak, pallid, and chlorotic. These evils are, moreover, intensified by the rapidity with which the compression has been applied, and all who are interested in their welfare should exert themselves to point out the egregious folly of such a practice.

Upon the æsthetic side of the question there is little to be said; here, as in so many other controversial questions, *de gustibus non est disputandum*. Amongst the Greeks, for ages the arbiters of taste, the women wore an apology for stays, and we are told that at a very early period the girdle was strengthened by metal, and long before the Christian era a broad band or belt was worn next the skin to support the breasts. According to Planché, the practice of tight lacing appears to have been introduced by the Normans as early as the twelfth century, and has been in use ever since.

We apprehend the ordinary Englishman, though he may wonder at, does not really admire, a wasp-like figure. Both hygienically and æsthetically, tight lacing is a mistake. Yet it must be remembered that, partly as a result of climatic conditions, partly from abundance of food and absence of severe work, and partly perhaps from the hereditary effect of sexual selection, a large proportion of the young women of England, of the middle classes at least, are disposed to the accumulation of fat in the breasts, and though from the age of seventeen to twenty-four the breasts may be firm and prominent, yet after that period they are apt, without artificial support, to become flaccid and pendulous.

The advantage of support, however, is no argument for the employment of compression. Dr. Hoyle made a good hit in saying that no woman regarded herself as properly dressed unless she felt a little uncomfortable. He might have added that the proportion of discomfort experienced may be pretty safely taken as the measure of mischief being effected in the willing victim of tight lacing.

What is a Sleeper?—The Boston *Journal of Commerce* thus defines it: A sleeper is one who sleeps. A sleeper is that in which the sleeper sleeps. A sleeper is that on which the sleeper runs while the sleeper sleeps. Therefore, while the sleeper sleeps in the sleeper, the sleeper carries the sleeper over the sleeper under the sleeper until the sleeper which carries the sleeper jumps the sleeper and wakes the sleeper in the sleeper by striking the sleeper under the sleeper, on the sleeper, and there is no longer any sleeper sleeping in the sleeper on the sleeper.

The Choice of Colours in Relation to Hygiene.—Mr. George Aitchison, A.R.A., in a recent lecture on Decoration, delivered at the Society of Arts, made the following noteworthy remarks on a subject which is too little regarded from a hygienic point of view, and is left too much to the freaks of fashion:—"In choosing colour we should be careful to have such a tone that we can live with, for most people have their dislikes and preferences. The colour of a lady's boudoir is mostly chosen because it sets off her complexion (?). In a room where we work we are soon conscious of an objectionable colour, which irritates instead of soothing us. Certain colours and certain tones are beneficial or prejudicial to health; very dark rooms are prejudicial, and red or yellow will also have a prejudicial effect on our health, if we have to remain in rooms of either colour all day and every day. A manufacturer had a women's workshop painted yellow, and found much more than the usual sickness amongst his hands; his doctor recommended whitewash, and the normal health was restored. Growers of hyacinths have noticed a marked effect on their blowing when they are put in glasses of certain colours."

Healthy Houses

"A happy home must be a healthy home."—*Anon.*

LATE IMPROVEMENTS IN HOUSE DRAINAGE.*

By W. P. Buchan, R.P.,
Sanitary and Ventilating Engineer.

We are all familiar with the expression, "The good old times." This is one of those saying, however, which requires to be taken *cum grano salis*, and which reminds us of the words, "'Tis distance lends enchantment to the view;" but in connection with my subject, I don't know that the *distance* is sufficiently great as yet to put much stress upon it. Perhaps more will depend upon the point of view, and whether looked at by the tradesman or his customer, or by the landlord or his tenant.

In the good old times, when executing his drainage work, the tradesman often did as he liked. If he did well, so much the better for all concerned; if he did badly, and scamped his work, it might be long before it was found out, and possibly he got little, if any blame when it was.

Then as to the landlord. Supposing the drainage of his houses was bad, and produced disease amongst his tenants, and perhaps also killed some, all this was looked upon as dispensations of Providence. He was seldom, if ever, held accountable for their death. All this is greatly altered. The tradesmen are better looked after now than formerly, while the landlord has often found out of late that if it can be proved that the death of any of his tenants, or of their children, has been caused by bad drainage, which he neglected to rectify when such was complained of, then it was *he* who was held accountable for the death, and was therefore held as liable in heavy damages for the same.

Previous to the last, or eighth, decade of this century, house drainage, was generally executed in a very perfunctory manner. Little attention was given to drains being air-tight. The pipes were often stuck together very loosely, and were almost always leaking at the bottom. Small attention was paid to correct levels or to seeing that the junctions of the plumbers' pipes with the drains were properly and securely made. The great point was to get the drains shoved in somehow, and then covered up and out of sight. As to disconnecting the house drains from the sewers, that in many cases was looked upon as a needless extravagance. People were fatalists. They looked upon drain poisoning as a judgment of God for some real or imaginary sins. It was not for the landlords to combat this. No. It was the medical officers of health who here came to the rescue of humanity. It is from the ranks of the medical profession that our modern prophets have mostly risen, and it is to the everlasting honour of that profession that its members have so widely sounded the warning—"Prevention of disease is better than cure."

In carrying this idea into practice, the work of the Sanitary Inspector and the Sanitary Engineer comes in, and this leads me up to my subject of the late or modern improvements in house drainage. These improvements have been made principally within the last dozen years or so. Previous to the middle of last decade, drainage was generally kept out of sight as much as possible, and there was no recognized proper system of doing the work. A drainage reformation then took place, and all this was changed. It came to be understood that the drainage of a house or building should be easily seen as to its working as far as possible, and that it must be held as an axiom that every house should be disconnected from the common sewer, and instead of its drains and soil and waste pipes being polluted with foul air from said common sewer, they should be kept as pure as possible with fresh air from the atmosphere. In this drainage reformation my own ventilating and disconnecting drain pipes have borne an important part; while the improved style of applying them, known now as the sectional system of drainage — the idea being partly borrowed from the medical practice of isolation in the case of infectious diseases—has made our houses of to-day much safer and healthier for the inmates than formerly. The application of the machine applied smoke-test to the drains, introduced by me about twelve years ago, and now becoming so general, forces the tradesmen to make their work air-tight. Then, in order to prevent chokage of the drains by cement being left sticking up inside of them, improved access openings are now provided on the pipes of longitudinal shape, which allow the head of the workman to get in to look along the interior of the pipe and see that all is clear and smooth, and no shirt collars of cement sticking up at any of the joints, or any tools, stones, or bricks left inside of them, all which has often been the case. (Models were here shown of the traps and access pipes.)

In regard to the ventilation of the drains, and of the soil and waste pipes delivering into them, this was generally very little attended to, and often altogether omitted. As a consequence, in a few years the lead of those pipes got corroded and holed, while, also owing to the want of ventilation, the water traps put on to the water-closets, sinks, and basins were often emptied by syphon action. All this is better looked after now, and soil pipes and waste pipes are carried up full size, or nearly so, to the roof or above the slates. It is coming to be recognized as a condition of good sanitary drainage and plumbing that all the foul air in either the drains or soil pipes should be blown off at as high a level as possible, just like the smoke from our chimneys.

An important improvement, coming into general practice in good drainage work, is keeping the waste pipes from baths, basins, and sinks separate from the soil pipes of the water-closets, and especially when hot water is run off down said waste pipes.

Another important point is to have all the sanitary appliances next an outer wall so that disconnection and ventilation as well as light may be got more easily, and that the drains may be kept out of the house as much as possible.

In connection with the ventilation of drains there is an important difference in practice between the engineers of a number of the Sanitary Protection Associations and the principal sanitary plumbers in the Kingdom, which it may be well to mention here, viz.:—The former allow the various soil pipes in a building to act as blow-off or ventilating pipes for the drain, so that whatever smells or disease germs may get into the drain are free to go up all the soil pipes. The latter, where possible and allowed, lock off each soil pipe from the drain, and ventilate the drain by a special blow-off pipe. This latter style is my own practice, as it gives real isolation and greater safety to the inmates, and has been done by me at many mansions, villas, and some tenements. It is the system Mr. Hellyer, of London, works upon, and is also adopted by many architects. I here showed a plan of the drainage

* Read at the Meeting of the Sanitary Association of Scotland on 5th July, 1888.

of Belmont Castle as lately carried out in this style by Mr. James Thomson, architect; each soil pipe being separately disconnected at foot outside by one of my traps, and the drain ventilated by a special blow-off pipe carried up to the top of a tower and surmounted with a fixed exhaust ventilator. The advantage of this system is felt in greater protection from fever, as all the soil pipes are kept distinct. This is all the more needed now when so many earthenware closets are in use with a very small water seal.

There has been a great deal of nonsense written of late in disparagement of the value of water as a trap against sewage gases by persons whose ignorance of the subject was, in my opinion, only equalled by their impudence. There is no better practical protection than a good syphon trap with sufficient water lock or dip, and the body of water in it, and its surface, especially on the house side, not too large. Even allowing that in time, and with a trap in which the water was not often renewed, sewage gas could be diffused through it, this would be very slowly, while all the disease germs, if any in the gas, would be caught by the water as in a filter and prevented from passing, and then the first time fresh water was let into the trap the old water and the disease germs in it would be sent off.

Plumbers and masons have often been to blame for giving the water trap a bad name owing to the improper way in which they fitted it in, being either without any water lock at all, or else with too little, perhaps with only one-eighth of an inch in place of from one and a half inches to three inches inside a house, and about one and a half inches, or fully that, on the drain traps outside. Then the plumber sometimes fitted in his lead traps with sufficient water seal but omitted to provide proper ventilation for the prevention of syphonage, so that when either the appliance or trap was on, or some near one connected to the same pipe was let off, the water trap was emptied by syphonage. Some tradesmen again have actually put in a pipe connecting the outer side of the trap to the inner side to improve the ventilation! For all these faults the trap itself was not to blame, but the improper application of it.

The new system of the registration of plumbers, which is being so largely applied for throughout Scotland, on a national basis, and especially in Glasgow and the west of Scotland district, will no doubt tend to prevent a repetition of former mistakes, and more especially as the technical education of plumbers is now to be gone on with, and all plumbers applying for registration after a few weeks will require to undergo an examination before being passed as qualified.* In his opening address, Sir James King referred to the importance of this registration movement.

I think it would be a good thing for the community at large if no new houses were allowed to be occupied until their drainage was examined by some competent party and certified as good. In fact, why should not houses be registered and classified like ships at Lloyds?

Hitherto we have heard great stress put upon the maxim "*mens sana in corpore sano*"—a sound mind in a sound body; but I think it would be for the benefit of the race and in agreement with the work done towards that object by our medical officers of health, sanitary inspectors and engineers if the proverb was altered to "*Corpus sanum dat mentum sanum*"—a sound body produces a sound mind.

* Owing to the large amount of bad drainage work done by masons, something will require to be done for their registration also, so that incapable hands may be prevented from spoiling work.

So long as the body is sound, good sustained mental work can be carried on, subject, of course, to proper education and training to start with, while distortion of the mind is often the direct effect of something wrong with some part of the body, the timely rectification of which, either medicinally or otherwise, would often prevent many crimes. As the independence and happiness of so many families—especially among the working classes—depend upon the health of their members, and particularly of the husband, it follows that no greater good can be done to society than to keep up that health at as high a standard as possible, and as that is the work of the sanitary inspectors, they, along with our medical officers of health, ought to have the sympathy and support of all sensible men and worthy citizens.

In case the opening reference to landlords might be taken to imply that they were entirely opposed to drainage improvements, I beg to say here that that is not the case, for many of them now not only recognize the necessity of attention to sanitary matters, but they have gone to great expense of late years to improve their properties. It is coming to be understood more and more that isolated improvements in drainage and sanitary matters only give partial protection, and that to fully and properly guard against disease we must have general sanitation all round.

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HOW ARTIFICIAL FLAVOURS ARE MADE.

In the wonderful laboratory of the growing plant, by processes of which we know almost nothing, the atoms of carbon, hydrogen, oxygen, and nitrogen are made to group themselves into compounds which give to our vegetables and fruits the delicious flavours characteristic of them. In most cases, this flavouring principle is so small in quantity, and so complex in its nature, that the chemist is unable to satisfactorily determine its composition, and it is probable that few of the natural flavours are simple chemical substances, but rather mixtures of different organic salts, ethers, and alcohols.

The flavouring principle of the majority of fruits can be directly extracted and preserved by simple means, forming extracts for flavouring food which are as unobjectionable as they are agreeable. Unfortunately, it happens, however, that many of these flavours can be imitated by various chemicals, which, while they are much cheaper than the natural product, are unwholesome and even dangerous. As a general thing, the artificial flavours are much coarser and ranker than the natural ones, and lack entirely the peculiar fruity taste distinctive of the latter. The greater part of the artificial essences belong to the class of compounds known as ethers, or, more strictly speaking, salts of an organic acid and base.

The artificial essence pineapple, for instance, is composed of ethyl butyrate, or a combination of butyric acid (the acid of rancid butter) and a radical known as ethyl, which is also present in common alcohol. By combining the ethyl with pelargonic acid, we obtain an ether with a flavour resembling that of the quince. Ethyl caprate is sometimes known as œnanthic ether, and is one of the flavouring substances found in old wine. Another radical, amyl, is also the base of several artificial flavours. Amyl alcohol is the poisonous fusel oil found in the poorer grades of whisky. Amyl acetate forms the well known essence of Jargonelle pear, while amyl valerianate is a very good imitation of the flavouring matter of the apple. Amyl caprate is found in Hungarian wine.

The natural flavours of the peach, plum, almond, &c., are due to nitrogenous bodies containing cyanogen, the base of the poisonous prussic acid. With the exception of the almond, these flavours are not often imitated, but a substance made from coal tar, known as nitro-benzole, has an intensely strong taste and odour of bitter almonds, and under the name of oil of mirbane is employed to a considerable extent as a perfume and flavouring extract. It is, however, a powerful poison, and should never be added to food. Vanilla, as is well known, is the product of a Mexican plant. When pure, it is perfectly wholesome, but it has been said to sometimes undergo a spontaneous decomposition, which renders it dangerous. This, however, is not fully confirmed, and the bad effects observed may have been due to other causes. It contains a substance commonly known as vanilline, but chemists distinguish it by the brief appellation methylprotocatechuic aldehyde. This is now made artificially, in large quantities, from the gum of the spruce and other coniferous trees.

There are many other organic bodies which possess very characteristic odours, although not commonly used for flavouring purposes. Formate of ethyl is sometimes used to give an agreeable taste to rum. Acetic ether, or acetate of ethyl, has the fragrance of cider, while acetacetic ether, has the odour of new-mown hay. Ethyl nitrite has a pleasant, apple-like smell, while amyl nitrite has an odour peculiar to itself, which produces such remarkable physiological effects that it is extensively used as a medicine. Salicylate of methyl occurs in the oil of wintergreen (checkberry), and was one of the first vegetable products prepared artificially. With the exception of nitro-benzole, all the artificial flavours mentioned above are composed of three elements only—carbon, hydrogen, and oxygen.

All the wide differences in odour, taste, and chemical behaviour, are due to slight variations in the proportions of these elements, and probably, also, to the position in which their atoms are arranged in the molecule. Strictly speaking, the only difference between the odourless glucose and the fragrant pineapple oil is that the latter contains four atoms less of oxygen, and the relation between the chemical composition and the physical properties of the organic bodies is a most important but still unsolved chemical problem.

We may hope to know much more in the future, as many skilful and patient investigators are hard at work upon this very subject. Although many of the above flavours are so strong that only a very small quantity is necessary to flavour a large amount of food, yet their use cannot be recommended. They are unwholesome, to say the least, and some are actually poisonous. Only natural fruit flavours should ever be allowed in the kitchen, and the cheap artificial essences should be left in their proper place, on the shelves of the chemist's laboratory.

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Mr. Wong Chin Foo, an Americanized Chinaman, and a well-known journalist of New York, contributes a very interesting article on "The Chinese in New York" to the August number of the *Cosmopolitan*. In speaking of the gastronomic habits of the Chinese, Mr. Wong (the Chinese put the family name first) says that in their restaurants these people do not generally pay by the dishes ordered, but by the tables or spreads, called *gzuh*. A first-class spread includes about forty courses, which it takes two days to finish, and which costs fifty dollars. A second-class spread, with twenty-eight courses, costs forty dollars. A third-class spread, with eighteen courses, costs twenty-five dollars. The cheapest spread includes eight courses, and costs eight dollars. This is the lowest price for which a man can order a formal dinner in a first-class Chinese restaurant (of which there are eight in New York City); but then the spread is made for any number of people within twelve. If a person simply wants to eat a short meal for himself and a friend or two, he can get ready-made dishes of fish, chicken, ducks, pigs' feet, rice, tea, &c., cheaper than in any other restaurant. The foods are all chopped in small pieces, rendering knives and forks unnecessary. The Chinese table implements are chopsticks of ebony or ivory, a tiny teacup, and a porcelain spoon.

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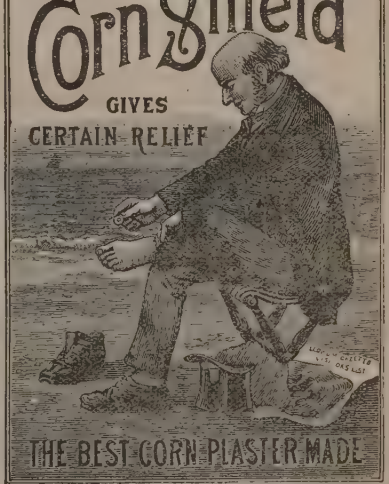

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THE OLD CIVET CAT, 17, COCKSPUR-STREET, LONDON.

PRICE LISTS FREE ON APPLICATION.

A staple dish for the Chinese gourmand is *chow chop svey*, a mixture of chickens' livers and gizzards, fungi, bamboo buds, pigs' tripe, and bean sprouts stewed with spices. The gravy of this is poured into the bowl of rice, and makes a delicious seasoning for the favourite grain. The tea is made by pouring hot water over the fresh oolong in a cup, and covering the latter with a smaller saucer to draw. Then, pushing back the saucer a little, the fluid is poured into a smaller cup, and more hot water is added to the grounds. This may be repeated five or six times, and the last cup will be nearly as strong as the first. The Chinaman always takes spirits with his meals, pouring rice whisky into a tiny cup from a pewter pot; but he always drinks moderately, and never apart from meals. When a party of Chinamen sit around a table, one dish of each kind of food is served, and all pick from the same dish with chopsticks. When there are several courses, the earlier dishes are never removed, and by the time a good dinner has been served, the table is literally buried under dishes.

The walls of the restaurant are hung with long scrolls of Chinese writings—maxims from philosophers for the entertainment of those who eat—and from the ceiling hang large fantastically-painted Chinese lanterns, and flower baskets that resemble bird cages.

To the rear is the kitchen, which is always scrupulously clean. The stoves are curiosities. They are long ranges built of thin broad bricks. In the top there are great pits, into which are firmly set iron gridirons imported from China. Two of the ranges have open pits only, and there are places where whole hogs are occasionally hung upon iron bars and roasted. Coal is never used in these Chinese kitchens, but only hay or hickory wood.

At least five hundred Americans take their meals regularly in Chinese restaurants, in orthodox Chinese fashion, with chopsticks.

Medicated Wines and Temperance Beverages.—The thirty-first report of the Commissioners of Her Majesty's Inland Revenue contains a variety of interesting information, covering the net receipts from excise, stamps, land tax, inhabited house duty, and income tax. While the report is largely concerned with financial details, clearly arranged in tabular form, the report by the principal of the laboratory in the appendix exhibits in small space the results of considerable labour extended over a wide range of subjects. The increasing difficulty of keeping the sale of liquids containing alcohol in legitimate channels is illustrated by reference to the so-called medicated wines, which are said to be quite suitable for use as beverages. Two liquids of semi-medical names are mentioned as only possessing "their respective prefixes to distinguish them from champagnes of ordinary quality." It has long been well known that many temperance drinks contain varying proportions of alcohol. In this report it is stated that the sample of elderberry syrup examined contained 8·7 per cent. of proof spirit; that of "non-alcoholic ginger cordial," 10·8 per cent.; that of "unfermented sherry," 17·0 per cent.; and that of "cowslip wine" (which looks oddly in this class), no less than 28·9 per cent. "Temperance" beverages have always been regarded with suspicion; but the medicated wines have been attracting the attention of the revenue officers by their flavour, and by the size and frequency of the dose recommended. Whether habits of intemperance are likely to be fostered by them is a question beyond the scope of the report, which is confined simply to the statement that an alcoholic liquid employed as a beverage of necessity becomes subject to revenue dues.

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

Soldiers' Rations.—This question was lately brought before Parliament, and has been discussed further, in the columns of several of our contemporaries, in a correspondence generally fair, but sometimes with curious inaccuracies and obvious exaggerations. When a correspondent in the *Standard* says, for instance, that a few Sundays ago his mess was served with "some beef that was perfectly rotten," we cannot take the statement as literally accurate, for it could not have passed the kitchen, or been cooked in such a condition. But, setting aside such clear exaggerations, there is little doubt the soldier's free or government ration is often not what it ought to be, either as regards quality or quantity. The subject should be discussed with entire impartiality, and we are glad to think that in such a spirit doubtless the War Minister and the military authorities are now looking into the matter. In all that concerns food and drink quality should be considered before quantity; for even if the latter is ample it would not make up for poor or unpalatable quality. Now it is asserted the soldier's ration of bread and meat, but especially the latter, is often of poor quality; if so, why should it be? We fear the accusation is true, and the explanation lies in the low prices paid to contractors. A good article of food commands a good price in the open market. We have no means of verifying figures put forward as contract prices by correspondents, but they remain uncontradicted, and there is no reason for supposing them to be untrue. Moreover, the War Office itself, when it gives a man, out of mess, 6d. a day in lieu of rations, shows what it considers the true value of the soldier's pound of bread and three-quarters of a pound of meat. We find (as we write) that in metropolitan markets beef is classified as "first," "second," and "inferior," and the current price of each per eight pounds, sinking offal, to be about 5s., 4s. 8d., and 2s. 4d.; this gives as the price per pound in pence 7⅝d., 7d., and 3⅝d. A correspondent "Miles" in the *Standard* asserts that in the South-Eastern Military District the contract price for meat varies from 4·23d at Canterbury to 7½d. at Shoreham, the average in the district being 5·62d. The cost of the soldier's three-quarters of a pound of meat would therefore be about 4¼d. in that District. The question remains, can an average honest contractor supply even "seconds" at these prices? No doubt, if he slaughters his own beasts, he has the offal to the good, but against it must be put slaughter-house expenses of all kinds. It is certain no contractor will, if he can help it, supply meat at a loss; and so we must conclude that if the meat is inferior—that described as derived from "aged bulls," "old cows," and foreign sources—the chief reason lies in the too finely-cut prices. To improve quality a better price must be paid, although that will be open to the serious objection of a substantial increase in the Commissariat Vote. A better price will bring better contractors to the front, and the soldier will be a clear gainer.

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Pasteur on Cholera Prophylaxis.—The New York *Herald's* Paris correspondence has the following: The scientific event of the week, of course, has been the Russian Dr. Gamaleia's alleged discovery of a method of anti-cholera inoculation. Pasteur, who at the time of

the Spanish Dr. Ferran's supposed discovery four years ago was extremely sceptical as to the possibility of preventing cholera by inoculation, is quite convinced. I interviewed him again this week. "I am so thoroughly convinced of Gamaleia's success," said Pasteur, "that I would to-morrow, were there need, allow the test to be made upon my own person, and in so doing should run a very small risk. Of course, there was nothing novel in the idea of inoculation against cholera; the difficulty lay in applying well-understood principles of vaccination to this new case, as I had already applied them to hydrophobia, and as some one else will one day apply them to tuberculosis and other diseases. The question was how to do it. There is where Dr. Gamaleia has shown himself great in deducing with wonderful patience and skill the practical realization from a theoretical possibility. Heretofore an insurmountable difficulty has lain in the fact that there was no known way of following the experimental methods, inasmuch as the human virus seemed incapable of infecting the lower animals. Gamaleia succeeded in producing a virus so deadly that a single drop would prove fatal to either a guinea pig or a pigeon. That was the first great stride. He had now a means for experiment. He could cultivate according to the usual chemical methods. Starting with the human virus, a bacillus almost harmless, he had also found a bacillus of the most virulent type. If a pigeon or guinea pig could be brought to resist this last form of cholera virus, which would ordinarily kill these creatures with absolute certainty, they might be fairly considered as having perfect immunity from the disease. This is precisely what Gamaleia has accomplished. He found that a series of inoculations with the weaker preparations rendered the bird or animal perfectly indifferent to the most violent cholera virus. The same reasoning applies to man, and, as I said, one would hardly run any risk in making the experiment, for the weaker cultices are incapable of injuring even the pigeon. By following the progressive method we should gradually arrive at complete immunity."

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Infantile Insurance.—The ethics of infantile life insurance have recently been brought prominently under public notice by correspondence in the *Times*, and some just and, indeed, inevitable indignation at the slaughter of the innocents has found expression there. It is difficult to realize the state of mind of parents, however oppressed by poverty, who can be induced, by the prospect of a small money payment, to perpetrate the slow murder of their own offspring. And, indeed, it cannot be doubted that such depravity is at least highly exceptional. The real danger arises from a somewhat different state of things. The children of the poor are by force of circumstances deprived of much of that attention which surrounds the children of the rich. Not only are they forced to put up with harder fare and more meagre accommodation, but they cannot be as constantly under the supervision of a watchful eye or the protection of a careful hand. Such inattention is in no sense culpable, but it easily passes into neglect, and a slight cause may in this way become sufficient to produce a most serious result, so that it must unfortunately be admitted that the prospect of even a petty pelf, tending as it does to counteract the natural sympathies, may prove a deteriorating influence, even in a case which is not one of marked depravity. Considerations of this kind greatly complicate the problem. They show, upon the one hand, that the danger is not so exceptional in kind as it might at first sight appear, but, on the other hand, that its cause is not so simple as to be easily eradicated. If the problem only were to repress a hideous traffic in infant life, it might be solved by an absolute prohibition of infantile insurance. But it is rather a question of surrounding the children with such moral influences as will lead their parents to bring their best abilities to the fulfilment of their parental duties. Only so can the neglect of which we have spoken be prevented. And under this point of view it may well appear doubtful if the infant community would be profited by restrictive legislation which took away from poor people the opportunity of providing by easy thrift against the comparatively heavy burden of burial expenses. No doubt much senseless extravagence is on such occasions indulged in by rich and poor alike; but that is beside the mark. An expensive fashion casts this burden upon the poor, and the question has to be faced—How are they to bear it? An insurance which provided exactly the necessary funds and no surplus would be an ideal expedient. The existing law makes £6 the limit of burial insurance in the case of children under five years of age, and it may well be doubted if this limit is not too high. When the Friendly Societies Act was under consideration in the House of Lords, an amendment was adopted making £3 the limit in the case of children under three years of age. The amendment was thrown out in the House of Commons, but it may well deserve renewed consideration. The heroic remedy of total abolition, which some correspondents of the *Times* have advocated, appears to ignore the important psychological fact that the maximum of parental attention can only be secured as the result of warm parental affection, and that measures which obviously increased the burden of bringing up a family of children would probably, by counteracting affection and thus relaxing diligence, do in the end more harm than good.—*Lancet.*

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The Value of Cleanliness.—Someone has said that "Cleanliness is next to godliness." He might have said it is a constituent part of it. Cleanliness and all forms of purity are the aims to be kept steadily in view. Clean air, clean water, clean food, clean soil, clean houses, and clean bodies; clean as regards organic, especially animal, more especially human, impurity, whether normal or morbid. Sir John Simon has, with singular appropriateness, called certain diseases "filth" diseases, and we know from history and experience how filth and disease have been associated. There was a time when filth of body was regarded as an external sign of purity of soul, and certain monastic orders looked upon it as meritorious to go about in rags, covered with filth, and infested with vermin. The "odour of sanctity" must, under such circumstances, have been anything but agreeable; but it is sad to think that men who were the educators of the people, men who had the moulding of not only religious but public secular opinion, should have been such miserably blind guides, and have thrown away such magnificent opportunities of educating, elevating, and benefiting the people. Such guides and leaders have been deposed, or relegated to the obscurity that is suited to them, and replaced by others holding more correct views on the question of bodily purity. The old historic epidemics seem to be banished never to return. Scurvy, ague, small-pox, cholera, typhus, and typhoid have been almost entirely brought under control. The absurd, wasteful, and vexatious requirements of quarantine are shown to be futile, and England has replaced it by a better system, to be soon adopted, it is reasonable to hope, by other countries. The prophylactic measures employed in most recent times give us the power of preventing, to a large extent, and mitigating

visitations of scarlet fever, diphtheria, and other zymotics, these measures including notification of disease, isolation, hospital accommodation, and disinfection.

FILTERED WATER.

The statement is sometimes made that polluted water is only apparently made wholesome by filtration, since the organic matter held in solution is not removed by the filter, and remains to invite and nourish new forms of animal life.

It is not correct to say that by filtration water is rendered wholesome only in appearance; ordinary river-water by proper filtration may be rendered wholesome, in fact. It is true that this cannot be done by a filter composed of a few inches of sand, and it is also true that a certain amount of organic matter will pass through any filter, and that if water containing such matter is stored for a few days, and especially if it be stored in an open reservoir, putrefactive action may again occur in it. This would happen also if the water had been boiled; for boiling does not destroy organic matter, it simply kills living organisms and changes the molecular condition of organic compounds, so that a foul water which has been boiled will again become offensive after exposure to the air for a few days; yet the boiled water may be quite wholesome if used soon after it has been heated.

All ordinary drinking water contains micro-organisms and organic matter, and these, as a rule, are perfectly harmless; in fact, the intestine of a healthy man always contains both of them in great quantities. Drinking water containing organic matter is unwholesome when the proportion is so large that putrefactive changes become apparent to the senses of smell and taste; and it is also unwholesome when there is a distinct liability to its contamination by fæcal matter, even though it may for a long time produce no disease. It is not wise for a city to rely on filtration of a noticeably polluted supply when it can, at a reasonable cost, obtain a fairly pure supply; but it would also be unwise for a city to demand a pure supply from a distance at immense cost, when, by proper filtration and aeration, a supply at hand could be made perfectly wholesome for the time being.

Of course, one who owns stock in a patent filter company, and one who is interested in a syndicate for monopolizing an area for pure water supply, will hold radically different views on such matters; but the truth, as usual, probably lies somewhere between the extremes of filtration everywhere and no filtration anywhere.

The Death-Rate of New Zealand.—New Zealand in 1886 had a death-rate of 10·54. This is probably the lowest rate in the world which a population of 631,000 has afforded, and will well repay the study of the sanitary statistician. New Zealand has even given lower figures, in 1874 it was 10·13, in 1884 10·39. The death-rate for three age-periods comes out as follows:—Under five years, 28·52; between five and sixty, 5·75; sixty and upwards, 48·28. The low death-rate is partly due to the fact that only about three per cent. of the population are above sixty years of age, and partly to other causes, such as the unrivalled climate, the select character of the population, and the youth of the colony, affording elbow room and abundant food for all. It needs no prophet to predict, that this low death-rate will not be maintained for many years if the island continues to increase at its present rate.

COMMENCEMENT OF A NEW VOLUME ON FRIDAY, OCTOBER 5th.

IMPORTANT ANNOUNCEMENT.

BONUSES TO SUBSCRIBERS TO "HEALTH."

Health, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the Publisher, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain Health from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we offer the following Free Gifts and Bonuses to all who subscribe to Health for one year or longer:—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of Health, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of Health weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of Health so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of Health, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to Health, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with Health should be addressed directly to the Publisher, 2, Paternoster-square, London, E.C., and *not to the Editor*.

An Arizona man, when invited to renew his subscription to a religious paper some time ago, declined in the following indignant terms:—"We find the *Gila Howler*, our local paper, much livelier than your old milk-and-water affair. Besides, you haven't played a square game in your 'ads.' My wife bought a pair of the corsets you advertised, and blamed if they didn't burst in three weeks, and we use them now to mend the chicken coop. I took half a dozen of the Dead Shot Pills you puffed up in a reading notice week before last, and the next day I was so sick that all the doctors in the town published bulletins about my approaching death, and the boys said I had the jim-jams. For these reasons I have determined to quit your paper and read the *Howler* only. As I know it always lies unless paid to tell the truth it can't lead me into temptation."

Sanitary Appliances, Etc.

"MAY'S PINK POWDERS."

These powders are intended for use in the nursery, and are calculated to be of service in many of the troubles to which infantile flesh is heir. In the irritability which often attends teething in children, these powders will be found a valuable aid to the treatment of the child, and in cases of stomach irritation at large, we are of opinion that "May's Pink Powders" will be found a safe and speedy remedy. The day of administering drugs containing opium and other narcotics to infants under the guise of "soothers" and teething "quieters," is, we should hope, past and gone. The press has not been slow of late years to denounce the pernicious habit of giving to infants drugs which not only are calculated to send children into a state of coma, but in many cases to produce death itself by a form of narcotic poisoning. In the case of "May's Pink Powders," no such dangers are to be apprehended from their use by mothers. They are warranted to contain no morphia, opium, or other form of sedative, and of this fact we have assured ourselves by chemical analysis. This is in itself a high recommendation, and is the best certificate of their harmless nature. These powders may be obtained of Messrs. May & Co., 93, Queen's-road, Brighton; while they may also be had from all chemists and medicine vendors.

A NEW POWDER PUFF.

We have received a specimen of a new powder puff, called the "Ariel," which differs from the ordinary puffs in that the powder is ejected at will from the receptacle, and in any direction indicated. The advantage of this puff in the application of powders to any surface without spilling the powder and without bespattering the clothes will be readily apparent.

NERVOUS EXHAUSTION.

PULVERMACHER'S World-Famed GALVANIC BELTS for the Cure of Nervous Exhaustion and Debility, have received testimonials from three Physicians to Her Majesty the Queen, and over Forty Members of the Royal College of Physicians of London.

The distressing symptoms of NERVOUS EXHAUSTION and DEBILITY are speedily removed by means of **PULVERMACHER'S world-famed Galvanic Belts,** which are so arranged as to convey a powerful electric current direct to the affected parts, gradually stimulating and strengthening all the nerves and muscles, and speedily arresting all symptoms of waste and decay.

Dr. Vines, Fellow of the Royal College of Physicians, writes 19th September, 1885: "Having used MR. PULVERMACHER'S BELTS for many years, in the course of medical practice, I am in a position to speak of their great value as a curative agent in cases of nervous disease or functional malady where Electricity is likely to be serviceable. I am entirely convinced of their efficacy."

Dr. C. Handfield Jones, F.R.C.P., F.R.S., Physician to St. Mary's Hospital, says: "I am satisfied that MR. PULVERMACHER is an honest and earnest labourer in the field of science, and I think he deserves to meet with every encouragement from the profession and scientific men."

Sir Charles Locock, Bart., M.D., says:—"PULVERMACHER'S BELTS are very effective in neuralgia and rheumatic affections, and I have prescribed them largely in my practice for other similar maladies, paralysis, &c."

For full Price List and particulars, see New Pamphlet "**GALVANISM: Nature's Chief Restorer of Impaired Vital Energy.**" Post Free from

PULVERMACHER'S
GALVANIC ESTABLISHMENT,
194, Regent-street, LONDON, W.

THE SWISS MILK CO.'S PREPARATIONS.

With reference to the productions of the Swiss Milk Company, of Gossau, St. Gall, Switzerland, and 50, Mark-lane, London, E.C., recently noticed in our pages, we now give directions for the use of the Pure Compressed Cream Milk. Reduce the contents of the tin into powder, stir it up with a small quantity of cold water until it is an equal liquid mass, and take care that the milk does not contain crumbs. Add as much hot water as to have in all one litre (nearly a quart), and boil it up a few minutes.

For the Pure Extract of Milk (compressed) the following are the directions for use: According to the quantity of milk to be prepared, take a part of the contents of the tin, mix it with cold water to a paste, and add the proportionate quantity of hot water (stirring well). It is recommended to boil the mixture if possible. When using the Extract with tea, coffee, or chocolate, simply put, according to taste, one or more teaspoonfuls of it in the beverage, and let it dissolve (stirring well).

As regards mixing proportions for general house and culinary purposes, add from six to ten parts of water; for feeding infants, twelve to fifteen parts, according to directions.

Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "The Editor of Health," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* Mr. A. P. Watt, The Publisher, *at the same address.*

RULES FOR CORRESPONDENTS.

Owing to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the Letter-Box Department of Health, to the following rules:—

1. All questions are answered free of charge in the columns of Health. A limited space only is available for the insertion of replies each week.
2. All letters must be legibly addressed to "The Editor of Health, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of Health. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded free to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending Health to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

LETTERS TO THE EDITOR.

HOW TO TAKE COD LIVER OIL.

Sir,—I beg to draw your attention to the following plan of taking cod liver oil. If you consider it worth inserting in your valuable journal, you are welcome to make what use you like of it:—

"After measuring the dose, if the person about to take it presses his nostrils with his thumb and forefinger sufficiently hard to prevent his smelling, and while pressing them he swallows the oil, wipes his lips, and sucks a peppermint or other highly flavoured lozenge for a few seconds, he will find the oil perfectly tasteless,

the only sensation when swallowing it being like that of an absolutely flavourless oil."

The foregoing plan, although so simple and effective, is, I think, generally overlooked; so if you see fit to have it inserted, I have an idea it will be welcomed by many who, like myself, find it most repulsive to take in the ordinary manner.—I remain, Sir, Yours, &c., H. W. Henley.

Glencairn, Martyr-road, Guildford.

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of Health will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the Publisher of Health, 2, Paternoster-square, London, E.C., and *not to the Editor.*]

Sam Taylor.—When the itching is present, apply a little of the following lotion to the parts twice and thrice daily, after bathing with tepid water, in which a little bicarbonate of soda has been dissolved: borax, two drachms; hydrochlorate of morphia, five grains; glycerine, half an ounce; rose water, four ounces. Mix. Label: "for outward use only."

A. X.—Look to your food in the first instance. Take twenty drops Cascara Cordial, once or twice daily, in water, an hour before your food, to correct the constipation, which is at the root of your troubles, and eat stewed fruits, whole-meal bread, and Grant's Oat Flour, giving up tea and coffee for a time at least. Try, also, Dahl's Cakes.

G. Paton.—Use thrice daily an injection made by adding a teaspoonful of Condy's Fluid to half a tumbler or so of tepid water. Take no alcohol; rest as much as possible; and let your diet be light. A little Lamplough's Pyretic Saline taken occasionally in the morning will also aid your cure.

Seerup.—The following is regarded as a lotion for the removal of freckles: Sulpho-carbolate of lime, two ounces; glycerine and rose water, of each, twenty-five ounces; alcohol, five ounces. Mix. Wash the skin twice in twenty-four hours, letting it remain damp with the lotion for half an hour.

A. Bland.—Try the following pill: Extract of aloes, eighteen grains; sulphate of quinine, twelve grains; pil. hydrargyri, six grains; extract of rhubarb, eighteen grains. Mix, and make into twelve pills; one to be taken daily about midday.

Ilkeston.—Each volume of Health runs six months, from April to September, and October to March respectively. Indexes to each volume can be had from the Publisher, price 2d. each; post free, 2½d. each.

Mark T.—Such cases as yours are eminently curable. Read the pamphlet, "A Lecture to Young Men" (post free, 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and follow out the directions therein given regarding tonics.

May.—Nothing will bleach the hair and not injure it. All such processes destroy the hair-texture.

Tenterden.—The following may be used in cases of falling hair, by way of stimulating hair-growth: Bay rum, two ounces; glycerine, two ounces; tincture of cantharides, one drachm; oil of bergamot, half a drachm; sulphate of quinine, ten grains; water, four ounces. To be used every morning, and to be rubbed into the roots of the hair, all other oils and pomades being avoided. Use a soft brush only, and wash the hair once a week or ten days at night with Bayley's Soap and tepid water. Keep the hair short for a time.

A. C.—You may with perfect safety take Cascara Cordial in doses of twenty drops in water, or in the form of Tabloids, between meals, once or twice daily. Eat stewed fruits, vegetables, and whole-meal bread; and avoid tea and coffee.

Tom.—Bathe the parts with a lotion composed of carbonate of soda, one teaspoonful, added to a pint of water and dissolved therein. This will allay the itching.

B. R.—Take the following:—Citrate of iron and ammonia, one drachm; syrup of orange-peel, half an ounce; water, eight ounces. Mix. Label: "Two tablespoonfuls to be taken thrice daily, before food."

E. Letts.—Try chrysophanic acid ointment, made by adding one drachm of the acid to one ounce of lard. Rub a piece the size of a pea into each patch of the psoriasis daily. The ointment will stain the clothes, so be careful on this latter head.

T. A.—Try a vegetable dietary—stewed fruits, apples or oranges, &c., and whole-meal bread, with Scott's Midlothian Oat Flour for supper and breakfast; avoid tea and coffee; take Cascara Cordial, twenty drops in water, or a Tabloid, between meals, once or twice daily. Sponge with cold water each morning; sleep on a hard mattress; take plenty of open-air exercise, and avoid fluids and suppers late at night.

IMPOSSIBLE ESCAPE.

Absolute Truth with Collateral Proof, from which there can be no Appeal.

For the past three years we have had a standing offer of £1,000 for any statement of ours published by us which was not, so far as we knew, *bonâ fide*. We did this that all readers might know the absolute truth of our assertions, and that they were based upon the value of our remedy and not upon idle words. Below we give a few extracts from recent letters, which speak for themselves. We will only add that we could furnish one hundred thousand more of a similar nature did occasion require, but we believe the British public is now convinced of the positive value of "Warner's Safe Cure." H. H. WARNER & CO.

"'Warner's Safe Cure' has given me a new lease of life."—General W. F. Nuthall, 10, Edith-terrace, Edith-grove, Brompton, London, S.W.

"'Warner's Safe Cure' has been of great benefit to me."—Grace Hawthorne, Lessee Princess's Theatre, Oxford-street, London, W.

"I have derived great benefit from 'Warner's Safe Cure' in the dissolving and removal of stone from the bladder, which the doctor said would have to be removed by instrument."—Alfred Bird, Ferndale House, Rugby.

"I never expect to be without a bottle of 'Warner's Safe Cure' in my house as long as I live and can get it."—Charles Albrow, 31, West Arnold-street, Lowestoft.

"Having been saved from a premature grave by the use of 'Warner's Safe Cure,' I am anxious the world should know of its efficiency in curing Bright's disease."—J. A. Piccaver, 165, Upland-road, East Dulwich.

Statements like the above are valuable because they are unsolicited, and are the thankful expressions of people who have suffered from the ravages of disease and have been made well by "Warner's Safe Cure." Reader, if you are ill and feel out of sorts, don't neglect these simple warnings of Nature. Begin treatment before it is too late, and while you can be cured. If you desire fuller details than those given above, write to the parties, enclosing stamps for reply, and you will receive full particulars of both case and cure. "Warner's Safe Cure" can be had of all chemists at 4s. 6d. per bottle, or of H. H. Warner & Co., 86, Clerkenwell-road, London, E.C.

George Hay.—Apply to the French Hygienic Society, 6, Conduit-street, Regent-street, London, W., for information about the hair.

Erde.—Take a teaspoonful of Syrup of the Hypophosphites in a wineglass of water, twice daily, after your meals.

A. B. C.—Gravel, certainly. If not too high the locality should be perfectly suitable for the diseases you name. You must, of course, take care to be above the river level somewhat to obviate damp and chill.

M. A. Peacock.—In the first place, use a nasal douche, and wash out the nostrils night and morning with tepid water, to which a little Condy's Fluid has been added. At bedtime you should inhale the vapour arising from a pint of hot water, to which a teaspoonful of Friar's Balsam has been added, and after your meals take fifteen drops Fer Bravais in water, twice daily, as a tonic.

B. G. Sell.—Try the trusses made by the Medical Battery Company, 52, Oxford-street, London, W. They will send you directions for self-measurement.

A. L.—We do not know of any such preparation. You must have mistaken the name.

G. Cable.—Give Dahl's Cakes a fair trial; they are easily taken with tea or milk, and are a food and a medicine in one.

Bella.—1. Mr. Pulvermacher, 194, Regent-street, W., will advise you regarding the matter. Write to him direct. 2. A few weeks at most we should say. 3. Not possible. 4. Mr. Pulvermacher will answer your last query.

N. Mears.—The treatment of whooping-cough to which you allude is that of Mobin's—by sulphuric acid. A physician expresses the opinion that, if it was carried out in every case, at the end of six months the disease would be unknown. The method used by him is as follows: The patient is in the morning put into clean clothes and removed elsewhere. All his clothes and toys, &c., are brought into the bedroom, and sulphur is burnt upon a few live coals in the middle of the room. The fire is allowed to remain in the room for five hours, and then the windows and doors are thrown open. The child sleeps in the room the same evening. About twenty-five grammes (a little under an ounce) of sulphur to every cubic metre may be burnt; this is equivalent to rather more than ten grains per cubic foot. The room is fumigated in a like manner during the night; the patient practically living in an atmosphere of diluted sulphurous acid gas for some days, while in several cases the process is repeated at the end of a week.

OMEGA.—1. Try Warner's Safe Cure in place of the medicine you name. 1. Yes; try Symington's Malt Extract. See advertisement of this firm (and address) on back page of last week's HEALTH. 3. Equally good. 4. Easily digested.

CARPENTER.—You should have your throat examined by a surgeon. Probably, your uvula is a little too long, and causes the tickling cough. This will be easily cured. Use, first of all, the gargle recommended to "K. B." in HEALTH, No. 287.

MACAULLY.—1. See advice given to "Peter Rowan" in HEALTH, No. 287. 2. Look to the state of your teeth, and use Bayley's Tooth Powder and the Tooth Wash made by that firm regularly (17, Cockspur-street, Pall-mall, London, S.W.), night and morning. The powders ordered to "Dolly" in HEALTH, No. 287, may also be tried by way of correcting any stomach-disorder.

CURIOUS ONE.—1. Only a popular superstition. Removal to the sea often produces a slight and temporary derangement of digestion, and people then rush to drugs to relieve their symptoms. 2. Difficult to say; statistics say that married men live longer than single ones.

M. A. Y.—If the varicocele is slight, simply bathe the parts in cold water, to which a little hazeline has been added, night and morning, and wear a suspensory bandage. Nothing more need be done, save avoidance of constipation. See advice, on this latter head, given to "Septimus" in HEALTH No 286. Use Dahl's Cakes also regularly.

P. WAT.—See advice given to "M. A. Y." above. For the rest, follow advice given to "Septimus" in HEALTH No. 286; and if not cured, write again.

JUVENIS.—If you mean the ordinary Bow's Liniment sold by druggists, it is a perfectly safe external application for sprains, lumbago, &c. If not, give us a reference to the liniment you mean.

GREENHORN.—1. You may take the step you name. The medical advice you had was good—provided always you are sensible enough to get rid of your nervous fears. 2. You suffer from no disease at all. The pamphlet you name tells you plainly about the quack exaggerations and lies which disturb the mind of the unwary and ignorant. 3. Simply attend to your digestion. Let your food be simple, take plenty of outdoor exercise, continue your morning sponge bath, and cast you cares to the winds.

HENRY BARNESDALE.—[You violate our rule against writing on each side of your note-paper.] We scarcely think you need be alarmed at all. You were not told you had any actual disease, and you would be more than foolish to disturb yourself, especially if your family history is good. Besides, one doctor's opinion is not exhaustive. We recommend you simply to take ordinary care of your health. Clothe warmly all winter in the Cellular Clothing (see advertisement in our pages), and take regularly a dessert-spoonful of Thomson's Cod Oil Cream (40, Dublin-street, Edinburgh) during the winter season, after your meals. Read the pamphlet, "A Lecture to Young Men" (post free for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.) for information regarding the other points noted in your letter.

I. THOMPSON.—Use the hair lotion recommended to "A. Alford" in the present number of HEALTH. Wash the head once every ten days with tepid water and Bayley's Spermaceti Soap (17, Cockspur-street, Pall-mall, London, S.W.), and keep the hair as short as possible. Use very soft brushes only and no hard combs. You should also look to your general health, and take a little stout to dinner daily. Fifteen drops Fer Bravais, taken in water after your meals, will also assist your cure.

O. T. S.—Follow advice given to "M. A. Y." in the present number. Keep your mind off your fancied ailment, and you will probably be troubled no further. It is the constant idea that "something is wrong"—in your case an utterly baseless idea—that causes all your worry and fears. Take more open-air exercise, and try a cold or tepid sponge-bath each morning.

DOUBTFUL.—Possibly you are right regarding the cause of your inconvenience. Simply wear a very loose corset in future, and try doing without one altogether. Wear an Allcock's Porous Plaster over the seat of the pain for a time, and at bedtime, or when the pain troubles you, take twenty grains bromide of potash dissolved in a wineglass of water. If not cured, write again.

JOY.—1. Write to Mr. Pulvermacher, 194, Regent-street, London, W., for full particulars regarding his electric belts, which are thoroughly genuine appliances. 2. No; it is the mitral valve you mean. 3. Nearly 20 per cent.

C. B.—For the itching try rubbing a menthol cone over the parts lightly. If this does not cure it, apply a little lotion made by dissolving one drachm of liquor of coal tar (Wright's) in a pint of water, thrice daily.

E. G. RAILTON.—You had better apply to the Medical Battery Company, 52, Oxford-street, London, W., for the information you seek.

PRINCEPS.—Mellin's Food is that you should use—you have mistaken the name.

J. BRIGHT.—1. Dahl's Cakes should be used by you regularly. 2. Howie's Filter (see advertisement in our pages) is that we recommend.

VANDA.—A very suitable preparation is Borthwick's Winter Cream, to be had from Mr. Borthwick, chemist, Selkirk, N.B. Wash with soft water and use Bayley's Spermaceti Soap (17, Cockspur-street, Pall-mall, London, S.W.) only. Take throughout the winter a teaspoonful of Scott's Pure Cod Oil Emulsion, twice daily, after meals.

ERRARE EST HUMANUM.—You only require to exercise great cleanliness, washing the parts morning and night, and you need a tonic. Take a teaspoonful of Syrup of the Hypophosphites in a wineglass of water, after your meals, twice daily. This will assist your cure. Avoid exertion, and see that no constipation exists.

EAR-DISEASE.—We do not think your treatment is at all calculated to cure you, and we repeat our advice that you should see a London specialist. You run a great risk of more serious disease.

C. GILL.—Take a tumbler of hot water between your meals twice or thrice daily. You would be safer to use Scott's Midlothian Oat Flour in place of oatmeal.

SOL FA.—Read the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, Medical Publisher, 356, Strand, London. W.C.), and follow out the hints therein given.

A. ALFORD.—For your hair, use the following lotion: Carbolic acid, half a drachm; tincture of nux vomica, two drachms; tincture of cantharides, B.P., two drachms; tincture of cinchona, one ounce; eau de Cologne and cocoa-nut oil, of each a sufficiency to make up four ounces. Mix. To be rubbed into the roots of the hair with a soft sponge once or twice a day.

DOIGS "Septicide" KILL DISEASE IN EVERY FORM.
DROPS AND LINIMENT

UNPARALLELED for Bronchitis, Diphtheria, Chest, Liver, and Kidney Complaints, Diarrhœa, Constipation Congestions, Rheumatism, Gout, Inflammations, Children's and Female Ailments, Fevers, Ulcers, Old Sores, Blood and Skin Diseases, Wounds, Pains, Bruises, &c., &c.

Of all Chemists, 1s. 1½d. per bottle; or post paid of the Proprietor, ALEXANDER DOIG, 7, St. Paul's Churchyard, London, E.C. Demonstrations Free from 10 to 4 daily.

NOTICE to LADIES and HOUSE KEEPERS.—Borwick's Baking Powder is guaranteed entirely free from alum—a cheap and highly injurious article frequently used in low-class baking-powders, which are retailed either by weight or in large tempting penny packets, and should be strenuously avoided.

SCOTT'S EMULSION
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